

CLAIMS

1. A reversibly immortalized mammalian liver cell line or a passage cell line thereof, containing an immortalizing gene interposed  
5 between a pair of site-specific recombination sequences and a suicide gene in the outside of the pair of site-specific recombination sequences, wherein the suicide gene can exhibit its function after excision of the pair of site-specific recombination sequences.

10 2. The reversibly immortalized mammalian liver cell line or the passage cell line thereof of Claim 1, wherein said mammalian is human.

3. The reversibly immortalized mammalian liver cell line or  
15 the passage cell line thereof of Claim 1, wherein a promoter derived from virus is not contained.

4. The reversibly immortalized mammalian liver cell line or the passage cell line thereof of Claim 1, wherein said reversibly  
20 immortalized mammalian liver cell line is CYNK-1 (deposited with International Patent Organism Depository, National Institute of Advanced Industrial Science and Technology, address: AIST Tsukuba Central 6, 1-1, Higashi 1-Chome, Tsukuba-shi, Ibaraki-ken, 305-8566 Japan, deposited date: March 10, 2004, accession number: FERM  
25 BP-08657).

5. A mammalian liver cell obtainable by excising the

immortalizing gene from a reversibly immortalized mammalian liver cell line or a passage cell line thereof of Claim 1.

5       6. A bioartificial liver, comprising a reversibly immortalized mammalian liver cell line or a passage cell line thereof of Claim 1 or a mammalian liver cell of Claim 5.

10       7. A cell preparation, comprising as an active ingredient, a reversibly immortalized mammalian liver cell line or a passage cell line thereof of Claim 1 or a mammalian liver cell of Claim 5.

15       8. A non-viral vector, comprising a non-vial promoter and encoding an immortalizing gene between a pair of site-specific recombination sequences and a suicide gene in the outside of the pair of site-specific recombination sequences.